REMARKS/ARGUMENTS

This response is submitted in response to the non-final Office Action dated August 26, 2004. Claim 14 has been amended, and claims 1-20 remain pending.

In the Office Action, the Examiner has rejected claims 1-3, 13-17 and 20 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,487,413 to Suojasto (hereinafter "Suojasto"). The Examiner has also rejected claims 4-8 under 35 U.S.C. §103 as being unpatentable over Suojasto in view of U.S. Patent No. 6, 192,243 to Yang et al. (hereinafter "Yang"). The Examiner has also rejected claims 9-10 and 18 under 35 U.S.C. 103(a) as being unpatentable over Suojasto in view of U.S. Patent No. 6,535,745 to Seraj (hereinafter "Seraj"). The Exmainer has also rejected claim 19 under 35 U.S.C. § 103 as unpatentable over Suojasto in view of both Wang and Seraj. The Examiner has also rejected claims 11-12 under 35 U.S.C. §103 as being unpatentable over Suojasto in view of U.S. Patent No. 5,659,596 to Dunn (hereinafter "Dunn"). Applicant respectfully requests that the Examiner reconsider these rejections based upon the following.

The Examiner has primarily relied upon the description provided by Suojasto. Suojasto describes a "method of estimating the need of capacity for different parts of a cellular radio system divided into location areas." (Suojasto, col. 1, ll. 7-9.) The described method is "based on the idea that the number of mobile stations located in a predetermined area can be estimated more accurately than before by compiling statistics on location update requests/messages transmitted from the mobile stations." (Id., col. 2, ll. 13-17.) The stated advantage of this method is that "it gives a more accurate picture of the number of phones located in the predetermined geographical area of interest, whereby potential bottlenecks concerning the capacity of the system can be found more easily." (Id., col. 2, ll. 31-35.) In one of the described embodiments, statistics are kept on the number of location update messages sent by mobile stations, as well as the preceding geographic area when the mobile stations were located. (Id., Fig. 3, col. 6, ll. 41-47.)

The Examiner has also cited Wand, Seraj and Dunn. Wang generally describes an algorithm that determines an optimum number of guard channels for a cell in a cellular communications network based on subscriber mobility and call traffic. (Wang, col. 2, ll. 57-62.) Seraj generally describes a method of defining location areas by using paging traffic and handoff

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traffic statistics. (Seraj, col. 3, ll. 15-18.) Dunn generally describes a system where mobile devices signal their identification information and location to the closest transceivers in a wide-area network area, and database lookups are used to find a target mobile device for message transmission. (Dunn, col. 9, ll. 16 to col. 10, ll. 7.)

In contrast to these references cited by the Examiner, independent claim 1 recites a method that comprises:

> receiving statistics indicating the number of active wireless devices in at least one communications cell;
> estimating the number of people in a geographic region of interest from the number of active wireless devices indicated by the received statistics.

Independent claim 11 recites a method that comprises:

> receiving statistics on the number and type of active wireless devices in at least one communications cell;
> estimating the number of people in a geographic region of interest from the received statistics on the number of active wireless devices; and
> predicting characteristics of the people in the geographic region of interest from the type and number of active wireless devices in the geographic region of interest.

Suojasto nowhere teaches or suggests estimating the number of people in a geographic region of interest. As noted above, at best, Suojasto describes counting the number of wireless devices in a geographic area. As Applicant has noted previously, merely counting wireless devices in a geographic area is not the same as estimating actual people in that geographic area. In the Office Action, the Examiner has asserted that "[i]t is well known that a mobile station or such type of wireless device is used by "people" and therefore, it can be concluded that whenever a mobile station is located, a physical person is located within its vicinity." (Office Action, p. 14.) However, even assuming that the Examiner's assertion is correct (which is not conceded by Applicant, as there could clearly be situations where a wireless device in not in the "vicinity" of a person), as not every person in a geographic area may carry a wireless device, the system described in Suojasto would not result in an estimate of the number of people in a geographic area without the additional estimating step recited in claims 1 and 11. Moreover, it is not surprising that Suojasto does not describe such a people-estimating step, because the method described in Suojasto is directed to counting wireless devices in order to determine capacity requirements for a cellular radio system – Suojasto does discuss estimating actual people. Wang,

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Seraj and Dunn each are also devoid of any teaching or suggestion of the estimating recited by claims 1 and 11.

As Suojasto and Dunn do not teach or suggest at least the foregoing elements of the method recited by claim 1, Suojasto cannot anticipate claim 1, and Suojasto and Dunn cannot render unpatentable claim 11. Applicant therefore believes claims 1 and 11 to be patentable, and respectfully requests that the Examiner withdraw the rejections of claims 1 and 11. As claims 2-10 and 13 depend from claim 1, and thus include all of the limitations of claim 1, these claims are patentable over Suojasto, Wang and Seraj on at least on the same grounds as claim 1, and Applicant respectfully requests that the Examiner withdraw the rejections of these claims as well. As claim 12 depends from claim 11, and therefore includes all of the limitations of claim 11, claim 12 is patentable over Suojasto and Dunn at least for the same reasons as claim 11, and Applicants respectfully request that the Examiner withdraw the rejection of claim 12 as well.

Independent claim 14 recites a method comprising:

> collecting active wireless device statistics from a communications cell over a period of time; and
> detecting changes in the collected active wireless device statistics; and
> generating a report including an estimate of the flow of people through said geographic area based on detected changes in the collected active wireless device statistics.

Suojasto neither teaches nor suggests generating a report including an estimate of the flow of people through a geographic area based on detected changes in collected active wireless devices statistics. As noted above, at best, Suojasto describes counting the number of wireless devices that are in a geographic area, and the number of devices that have moved from one area to another -- not generating a report including an estimate of the flow of actual people. Applicant's analysis in this regard is similar to that presented for claim 1 above. As Suojasto does not teach or suggest at least the foregoing elements of the method recited by claim 14, Suojasto cannot anticipate claim 14, and therefore Applicant believes claim 14 to be patentable over Suojasto. As claims 15 and 16 depend from claim 14, and thus include all of the limitations of claim 14, these claims are patentable over Suojasto on at least on the same grounds as claim 14. Applicant respectfully requests that the Examiner withdraw the rejections of claims 14-16.

Independent claim 17 recites an apparatus comprising:

> an interface for receiving an active wireless device count from at least one communications cell;
> means for estimating based on the received active wireless device count the number of people in a geographic region including at least a portion of said communication cell.

Suojasto nowhere teaches or suggests a means for estimating based on the received active wireless device count the number of people in a geographic region including at least one communications cell. As noted above in Applicant's discussion as to claim 1, at best, Suojasto describes counting the number of wireless devices in a geographic area – not estimating based on an active wireless device count the number of people in a geographic region. Wang, Seraj and Dunn are likewise devoid of any such teaching. As Suojasto does not teach or suggest at least the foregoing elements of claim 17, Suojasto cannot anticipate claim 17, and therefore Applicant believes claim 17 to be patentable over Suojasto. Applicant respectfully requests that the Examiner withdraw the rejection of claim 17. As claims 18 and 19 depend form claim 17, and therefore include all of the limitations of claim 17, claims 18 and 19 are patentable over Suojasto, Wang and Seraj (either individually or in combination) on at least the same grounds as claim 17. Applicant respectfully requests that the Examiner withdraw the rejections of claim 18 and 19 as well.

> Independent claim 20 recites a system comprising:
> a plurality of wireless communications centers, each wireless communications center collecting statistics on the number of active wireless devices being serviced at a point in time;
> a processing center coupled to the plurality of wireless communications centers, the processing center receiving from said wireless communication centers the statistics on the number of active wireless devices being serviced, the processing center including:
> means for estimating the number of people in a geographic region of interest from the number of active wireless devices being serviced by said wireless communications centers.

Suojasto nowhere teaches or suggests a means for estimating the number of people in a geographic region of interest from the number of active wireless devices being serviced by a wireless communication center. As noted above in Applicant's discussion as to claim 1, at best, Suojasto describes counting the number of wireless devices in a geographic area – not the number of people in a geographic region. As Suojasto does not teach or suggest at least the foregoing elements recited by claim 20, Suojasto cannot anticipate claim 20, and therefore

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Applicant believes claim 20 to be patentable over Suojasto. Applicant respectfully requests that the Examiner withdraw the rejection of claim 20.

In view of the foregoing amendments and remarks, Applicant respectfully submits that the pending claims are in condition for allowance. Accordingly, Applicant requests that the Examiner pass this application to issue.

If there are any outstanding issues which need to be resolved to place the application in condition for allowance the Examiner is invited to contact Applicant's undersigned representative by phone to discuss and hopefully resolve said issues. To the extent necessary, a petition for extension of time under 37 C.F.R. 1.136 is hereby made, the fee for which should be charged to Patent Office deposit account number 07-2347

Respectfully submitted,

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